

Fig. 1. Comparison of 4 DPD primer/probe sets for their ability to amplify DPD mRNA.

**DPD Gene expression detection using various primer/probe sets in
Formalin Fixed paraffin embedded tissue**

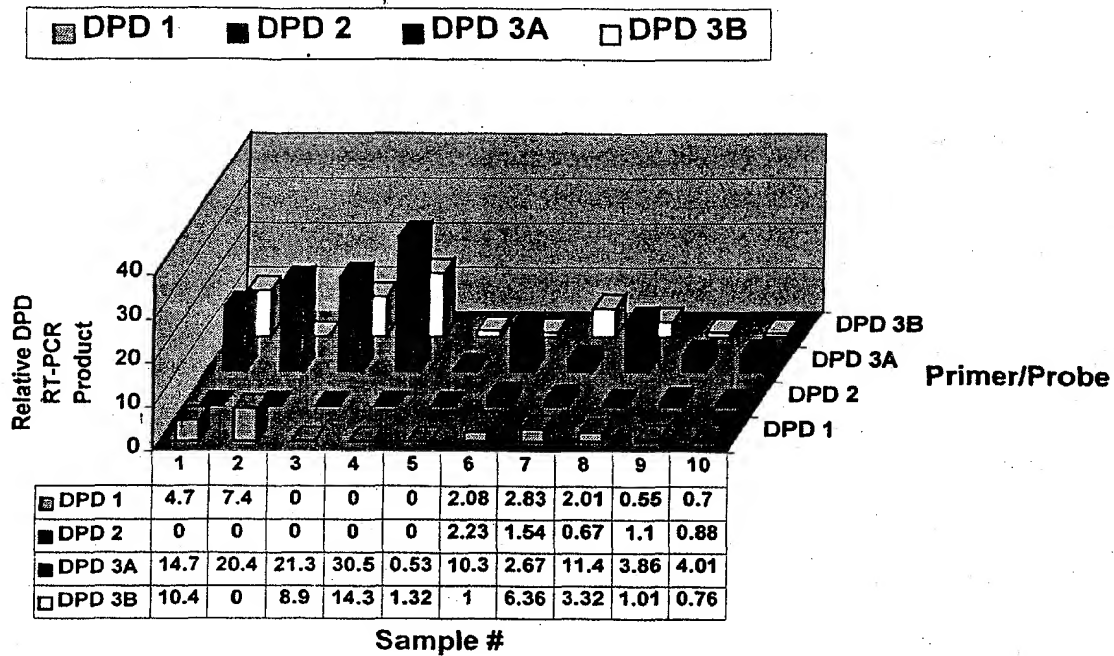
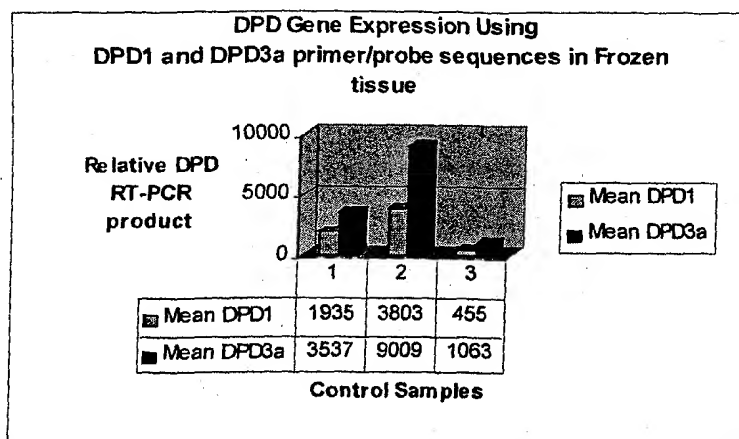


Fig. 2. Comparison of amplification efficiency of primer/probe DPD 3A and DPD 1 to amplify DPD mRNA from frozen tissue.



10000 5000 0

Fig. 3. Chart illustrating how to calculate *DPD* expression relative to an internal control gene.

	from "test" reaction					from "calibration" reaction					Uncorrected Gene Expression (UGE)	Published <i>DPD</i> values	Derivation of <i>K_{DPD}</i> (average <i>K</i>)		Corrected Relative <i>DPD</i> exp.
	Sample	<i>C_T</i> <i>DPD</i>	<i>C_T</i> <i>P-actin</i>	ΔC_T	$2^{-\Delta C_T}$	<i>C_T</i> <i>DPD</i>	<i>C_T</i> <i>P-actin</i>	ΔC_T	$2^{-\Delta C_T}$	<i>K</i>	<i>K_{DPD}</i>		<i>K</i>	<i>K_{DPD}</i>	
Experimental	unknown 1	25.05	19.84	5.21	.027	-	-	-	-	-	4.47	-	-	1.08×10^3	4.83×10^3
	unknown 2	28.18	18.76	9.42	.0015	-	-	-	-	-	0.241	-	-	1.08×10^3	0.2608×10^3
	Calib. RNA	-	-	-	-	26.92	19.55	7.37	.006	-	0.006/0.006=1	-	-	-	1.08×10^3
From Published Data	L7	31.04	24.56	6.49	.0111	-	-	-	-	-	2.45	2.7×10^3	1.10×10^3	1.08×10^3	-
	L91	27.95	20.5	7.45	.0057	-	-	-	-	-	1.26	1.2×10^3	1.08×10^3	1.08×10^3	-
	L121	28.88	19.2	7.68	.00488	-	-	-	-	-	1.07	1.1×10^3	1.02×10^3	1.08×10^3	-
	L150	33.32	22.88	10.44	.00072	-	-	-	-	-	0.158	0.17×10^3	1.08×10^3	1.08×10^3	-
	L220	26.96	22.01	4.95	.03235	-	-	-	-	-	7.12	7.3×10^3	1.03×10^3	1.08×10^3	-
	L164	25.44	21.4	4.04	.0607	-	-	-	-	-	13.38	16×10^3	1.2×10^3	1.08×10^3	-
	Calib. RNA	-	-	-	-	27.86	20.086	7.782	0.005	-	0.005/0.005=1	-	-	-	-

Figure 4: Boxplots of relative DPD ($\times 10^{-3}$) expression levels for specimens of each histologic type

